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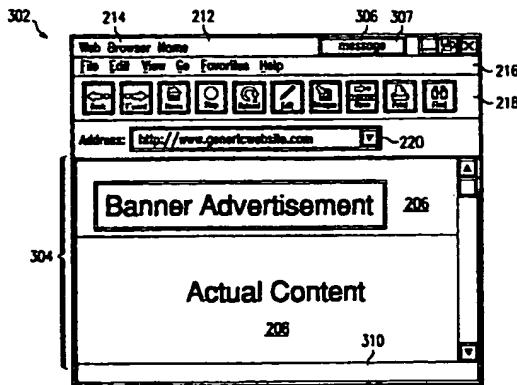
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(54) Title: **SYSTEM AND METHOD FOR PRESENTING ELECTRONIC MESSAGES UNOBTRUSIVELY**



**WO 01/20474 A1**

(57) Abstract: A method and system for displaying electronic messages (206), such as advertisements, unobtrusively on a target application are disclosed. In a most preferred embodiment, a messaging application executes on a user's PC to display a message unobtrusively on a target application. In a most preferred embodiment, the target application is a web browser (302) that displays web pages to a user. In a most preferred embodiment, the messaging application executes to display an electronic message on the title bar (212) of the web browser window (302). Thus, in a preferred embodiment, the messaging application is independent of the target application (e.g., web browser) and the document (e.g., web page) being displayed by the target application. Preferably, the message is presented on a message tool, which can be an interactive tool, such as a hyperlink button, which when activated by a user accesses a document related to the message. According to one aspect of the present invention, the electronic message is presented as a targeted message based at least in part on demographic and/or psychographic information for the user. According to another aspect of the present invention, the electronic message is presented as a countermessage and/or symbiotic message based on the content of a document being accessed by a user.

**SYSTEM AND METHOD FOR PRESENTING ELECTRONIC MESSAGES  
UNOBTRUSIVELY**

**RELATED APPLICATIONS**

This application is related to co-pending and commonly owned U.S. Patent Application Serial No. 09/009,071 filed January 20, 1998, entitled "SYSTEM AND METHOD FOR ACCELERATING NETWORK INTERACTION," which is hereby incorporated herein by reference.

TECHNICAL FIELD

The present invention relates in general to message presentation, and in specific to a system and method for presenting an electronic advertisement unobtrusively.

BACKGROUND

As digital computers become more prominent, they provide an increasingly appealing platform for presenting messages, such as advertisements, to users. An increasing number of business and other transactions are conducted via digital computers. Additionally, an 5 increasingly large number of people utilize computers to obtain news, entertainment, and a variety of other types of products and services available to users through computers. Some products and services are provided via a communication network, such as the Internet, an intranet, a Local Area Network (LAN), or a Wide Area Network (WAN), and other products and services are available to users via applications executing on a stand-alone computer. 10 Accordingly, computers provide a high traffic medium for message providers, such as advertisers, to reach a large number of users.

The Internet is a very popular method of providing messages, content, and information, including electronic advertisements. The Internet is generally regarded as the fastest growing communication medium ever. It is estimated that more than 100 million people are now online. 15 The Internet took a mere four years to reach 50 million people, while the same feat took radio 30 years and television 13 years. Additionally, it is estimated that Internet traffic is doubling every hundred days, and that electronic commerce should achieve the \$300 billion mark by the year 2002. As the number of Internet users increases, the Internet is becoming a valuable platform for companies and other entities to reach individuals with messages, content and 20 information, including electronic advertisements.

Companies are taking advantage of the Internet by presenting electronic advertisements on various web sites. Generally, web sites are locations on the World Wide Web, and each web site is typically owned and managed by an individual, company, organization, or other type of content providing entity. Each web site generally contains at least one web page, which is a 25 document that is presented to a user when the user accesses its unique Uniform Resource Locator (URL). Such web pages may comprise content from a content providing entity that a user seeks or desires. Additionally, the content providing entity may place or allow others to place advertisements within the web page document. Typically, advertisements of the prior art are presented within a web page document that a user is viewing. For example, an owner of a

particular web site may sell advertising space within its web page document to an individual company. Alternatively, an owner of a particular web site may sell or "lease" advertising space to an advertising agency, such as DoubleClick, and such advertising agency may then display one or more ads from its customers on the web site. Thus, such prior art electronic advertisements are included within the content portion of a web page.

Electronic advertisements of the prior art are typically provided within the content of a document, such as a web page, being displayed by an application, such as a web browser. For example, a portion of an application, such as a web browser, that is used for displaying the content of a document, such as a web page, is also utilized for displaying a document containing electronic advertisements of the prior art. Accordingly, display area which could otherwise be used to present desired content to the user is preempted to display an undesired message, such as advertisements. Moreover, as these messages are placed in the content portion of the application, such messages (e.g., electronic advertisements) of the prior art are typically tied to a particular document (e.g., web page). That is, because the messages are displayed within a particular document, such messages only reach a user if the user accesses the particular document. Moreover, such tying of these messages to the content documents requires the cooperation of the content providing entity. Accordingly, the content providing entity must remain in the loop, thus limiting the possible options for message content and often requiring extensive consideration for placement of a message within such content document.

Several problems exist for prior art electronic messaging methods, such as advertising methods. First, such messaging methods are generally presented in an obtrusive, i.e., undesirably prominent, manner. For example, electronic advertisements (also referred to as "electronic ads" herein) are generally presented on a portion of a document (e.g., web page) that a user is viewing. Accordingly, users may resent such advertisements for interfering, obstructing and/or detracting from the actual information ("content") of the document that the user is desiring to view. Thus, prior art electronic messages, such as electronic advertisements, are undesirably prominent within the content of information that a user is desiring to view.

Additionally, because advertisements (or other electronic messages) are presented on specific documents (e.g., web pages), the advertisement only reaches a user if the user accesses

one of such specific documents. For example, a prior art Internet advertisement typically only reaches a user if the user accesses a particular web site or one of a group of particular web sites having the advertisement. Accordingly, companies and advertising agencies must attempt to place electronic ads on web pages that are likely to be accessed by many users. As a result, advertising space for very popular web pages may be very expensive to advertisers because of supply and demand. That is, because many advertisers want to advertise on such a popular web site, such high demand may result in advertisements on the web site having a relatively high cost. Moreover, there is no guarantee that users will continue to access the particular web site and view the advertisement.

Because such prior art electronic messages are typically a banner located somewhere within the content of a particular document (e.g., web page), the message may not remain in the view of a user if the user scrolls to a different part of the document. For example, suppose a banner advertisement is located on the top of a web page with the actual content of the web page presented below such advertisement. A user desiring to view the actual content of the web page can scroll down through the web page to view its actual content causing the banner advertisement to scroll up out of the user's immediate viewing area. Because such prior art electronic messages may not remain within a user's viewing area, such messages are not as effective as they would be if positioned such that they continuously remain in a user's viewing area.

Some prior art electronic messages may be implemented as a stationary message that remains on the display as a user scrolls through the actual content of a document. For example, a banner advertisement may be provided across the top portion of a web page. A scroll bar may be provided that allows a user to scroll the actual content of the web page below the banner, such that only the actual content of the web page is scrolled without effecting the banner ad (i.e., the banner ad remains displayed on the top portion of the web page). However, this technique of providing a stationary electronic ad within a web page reduces the amount of the display area that may be utilized for viewing the actual content of a web page. That is, a portion of a web browser's display area is dedicated to displaying such a fixed/stationary electronic message, which results in less of the display area being utilized for displaying the actual content of a web page. Thus, such a fixed/stationary electronic message within a document is obtrusive.

Another problem with prior art electronic messages is that such messages are generally not based on demographic information specific to a particular user. Advertisers and other messengers generally do not have demographic information about a user utilizing the target application (e.g., web browser). Accordingly, messengers typically attempt to place messages 5 within a particular category or type of document hoping to reach a target group of individuals. For example, an advertising agency may allow advertisers to place ads on particular web sites contained within categories, such as automotive, sports, entertainment, travel, health, news and information, technology, college, and Internet search web sites. By strategically placing ads on web sites contained within a particular category, advertisers hope to reach their target audiences. 10 However, such an electronic ad only reaches a particular user within an advertiser's target audience if that particular user accesses one of the specific web sites on which the ad is placed.

For example, suppose a company selling tools purchases an electronic ad to be placed on the Internet from an advertising agency. Further suppose that mechanics fall within the company's target audience. As a result, suppose that the company focuses its ad to web sites 15 contained within the automotive category. Now suppose that a mechanic, Joe Mechanic, accesses the Internet to check the stock market and purchase flowers for his wife. Because the web sites accessed by Joe Mechanic are not within the automotive category, the company's electronic ad failed to reach Joe, even though Joe is a person within the company's target audience.

Furthermore, electronic messages, such as electronic ads, that are included within a 20 document (e.g., web page) communicated via a communication network (e.g., the Internet) of the prior art can adversely affect the transmission rate of such a document. That is, text and graphics associated with such electronic ads (or other messages), although often not desired by the user, are often quite large in data content, requiring large amounts of communication bandwidth to be transferred to or from the user's computer. Thus, such communication of 25 electronic ads contained on a particular document (e.g., web page) generally increase the transmission time required for communicating such a document via a communication network (e.g., the Internet) to a user. Because a user often only desires to view the actual content of a document and not the advertisement information contained thereon, a user would probably prefer

to forgo the transmission of such advertisement information contained within the document in favor of having the desired content of the document transmitted at a faster rate.

In view of the above, there exists a desire for a method and system for presenting electronic messages, such as electronic advertisements, to a user in an unobtrusive manner.

5 There exists a further desire for a method and system for presenting electronic messages to a user without such messages being required to be displayed only when particular documents (e.g., web pages) are accessed. That is, there exists a desire for a method and system for presenting electronic messages, such as electronic advertisements, that are not required to be associated with or tied to a particular document (e.g., web page). A further desire exists for a method and system for presenting electronic messages in a manner that does not require the cooperation of a content providing entity. Still a further desire exists for a method and system for presenting electronic messages to a user in a manner such that the messages can remain in the viewing area of the user.

10 15 There exists a further desire for a method and system for presenting electronic messages to a user in a manner that has no or very little effect on the transmission rate of a desired document (e.g., web page). Yet a further desire exists for a method and system for presenting electronic messages, such as electronic advertisements, to a user wherein such messages can be targeted to particular individuals based at least in part on demographic information or other information specific to such individuals.

SUMMARY OF THE INVENTION

These and other objects, features and technical advantages are achieved by a system and method which provides electronic messages in an unobtrusive manner. A preferred embodiment of the present invention presents such messages in an otherwise unused or unoccupied portion 5 of the display of a computer executable target application. In a most preferred embodiment, an electronic message is presented unobtrusively by positioning such message on the title bar of a display window of a target application, such as a web browser.

A "target application" is an application executing on a digital computer on which it is desirable to place an electronic message, such as an electronic advertisement. It should be 10 understood that in a preferred embodiment there may exist more than one target application executing on a digital computer. For example, several applications may be target applications, which may be executing simultaneously. Additionally, in a preferred embodiment each target application may have 1 or more displays (e.g., one or more windows), and electronic messages may be targeted to each of such displays of a target application. As another example, the target 15 application may be the active application executing on a digital computer, and as another application becomes the active application it can be designated a target application. For instance, if a user is working in a word processor application, such word processor can be the target application for presenting electronic messages unobtrusively. If such user closes the word processor and accesses a web browser application, such web browser can then be the target 20 application. As still another example, one or more applications may be predefined as target applications, wherein when such predefined target applications are executing on a digital computer, electronic messages will be presented thereon.

To aid in understanding the present invention, the specific example of an Internet browser interacting with the Internet, such as to interact with a web site, will be discussed. However, it 25 shall be understood that the present invention is not limited to use with network user interfaces in the form of Internet browsers and the Internet. The present invention is useful in any number of network situations, such as local area networks (LANs), wide area networks (WANs), intranets, interactive cable systems, and the like, wherein advertisements or other information may be communicated via such network. Moreover, use of the present invention is not limited

to networks, but may in fact be used to present advertisements or other information in an unobtrusive manner within stand-alone computer systems. Thus, many situations are available for presenting an electronic message, such as an advertisement, in an unobtrusive manner to a user, and therefore any such situation is intended to be within the scope of the present invention.

5        Additionally, many other types of application programs can be utilized as a target application instead of or in addition to a web browser, and any such application program is intended to be within the scope of the present invention. For example, word processors, spreadsheets, video games, and other applications may serve as target applications. Thus, the present invention is not intended to be limited only to the exemplary target applications (e.g., 10      web browsers) provided herein, rather, such applications are intended as examples that render the disclosure enabling for many other types of target applications.

15      The specific example of an electronic message implemented as an advertisement is utilized herein. However, many other types of messages and information can be displayed in an unobtrusive manner as disclosed herein, and any such type of message and information is intended to be within the scope of the present invention. Thus, the present invention is not intended to be limited only to the exemplary electronic advertisement provided herein, rather such electronic advertisement is intended as an example that renders the disclosure enabling for many other types of messages and information. Accordingly, other types of messages and 20      information outside the realm of advertisements are intended to be within the scope of the present invention. In a preferred embodiment of the present invention, such electronic messages may include text, graphics, and/or other types of information to communicate advertisements and/or other information to a user.

25      Additionally, as used herein, an "electronic advertisement" is not limited solely to traditional advertisement information. That is, "electronic advertisement" is not limited solely to presenting advertisements for products or services. Rather, other information may be communicated in an unobtrusive manner as an advertisement. For example, an advertisement may contain information similar to that found in the classified section of a newspaper. For instance, an advertisement may communicate that a particular company is now hiring qualified persons or that a particular person is desirous of employment in a particular field. As further

examples, an advertisement may communicate that a company has particular products or services for sale or it may communicate that a particular individual is desirous of certain products or services. As still further examples, an advertisement may communicate a "personals" ad for a particular individual or a "community service" ad. Accordingly, many types of information can 5 be communicated as an "electronic advertisement" described herein.

In a preferred embodiment, electronic messages are presented unobtrusively on a target application. In a most preferred embodiment, such electronic messages are presented on the title bar of a display of such target application. Also, in a most preferred embodiment, such electronic messages are electronic advertisements. Additionally, in a most preferred embodiment, such 10 electronic messages are interactive messages. For example, an electronic message can be presented as a hyperlink button, which when activated by a user links the user to a related location or documents (e.g., web page).

Moreover, in a preferred embodiment, electronic messages can be targeted to a specific user. For example, electronic advertisements (or other types of messages) can be targeted to a 15 specific user based on demographic information, psychographic information and/or other information. Additionally, in a preferred embodiment, electronic messages can be targeted based on content information. For example, electronic advertisements (or other types of messages) can be presented to a user based on the content that a user is accessing with a target application. For instance, suppose a user is viewing a web page on a web browser. Electronic messages, such as 20 advertisements, may be presented based on the content of the web page being viewed. Such content-based targeting, allows for counter-messaging and symbiotic messaging to be performed. For example, if a user is accessing a document, such as a web page, having information associated with Company A, counter-advertisements may be displayed for Company B, a competitor of Company A. As another example, if a user is accessing a document, such as a web 25 page, having information about a particular product or service, symbiotic advertisements may be displayed for related or complementary products or services.

Further, in a preferred embodiment, electronic messages can be targeted based on target application information. For example, electronic advertisements (or other types of messages) can be presented to a user based on information about the type of target application being utilized.

For instance, certain types of advertisements may be presented on one type of target application, such as a word processor application, and other types of advertisements may be presented on another type of target application, such as a video game application.

Highly effective messaging methods (e.g., advertising methods), such as targeted messaging, content-based messaging (e.g., counter-messaging and symbiotic messaging), and target application-based messaging, as well as other effective messaging methods that are available through a preferred embodiment of the present invention, have not been available in prior art electronic messaging methods (e.g., advertising methods). Typically, demographic, psychographic, and other information related to a specific user have not been available to message providers (e.g., advertisers) through prior art messaging methods. Accordingly, targeted electronic messaging has not been effectively utilized in the prior art. Also, prior art electronic messaging methods typically do not utilize other effective messaging methods, such as counter-messaging. For example, suppose Company A sells books and has an Internet web site. Further suppose that Company B also sells books and is a direct competitor of Company A. Company B would like to place an advertisement on Company A's web site to target those individuals interested in purchasing books from its competitor Company A. However, Company A obviously will not allow either Company B or an advertising agency to place such counter-advertisements on its web site. Because prior art electronic advertising is dependent on the content providing entity permitting such advertising, counter-advertising has not been possible through prior art electronic advertising methods.

It should be appreciated that a technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein such electronic messages are presented unobtrusively on a target application. Accordingly, in a preferred embodiment, electronic messages are presented such that they are not undesirably prominent on a target application.

A further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein such electronic messages are not required to be tied to a particular document (e.g., web page). Accordingly, such electronic messages may be presented without requiring that a user access a particular document.

Furthermore, such electronic messages may be presented without requiring the cooperation of a content providing entity (e.g., the owner of a web site).

5 A further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein such electronic messages can remain within the view of a user. Accordingly, electronic messages, such as advertisements, may be more effective by remaining in the user's view.

10 Still a further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein such electronic messages are presented in a manner that does not adversely affect the transmission rate of documents (e.g., web pages) being communicated via a communication network (e.g., the Internet). That is, in a preferred embodiment, electronic messages are provided in a manner that has little or no affect on the transmission rate of documents being communicated via a communication network.

15 A further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein targeted messaging (e.g., targeted advertising) can be accomplished. For example, electronic messages can be targeted to a specific user based on demographic, psychographic, and/or other information about such user.

20 Still a further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein content-based targeting of electronic messages can be performed. For example, based on the content being accessed by a user (e.g., the content of a web page), counter-messaging and/or symbiotic messaging can be performed. For instance, based on the content of a document being accessed by a user, counter-advertising and/or symbiotic advertising can be performed.

25 Yet a further technical advantage of a preferred embodiment of the present invention is that a system and method for presenting electronic messages are provided wherein application-based targeting of electronic messages can be performed. For example, based on the type of application being utilized by a user (e.g., a word processor or web browser), certain types of

messages can be presented to the user. For instance, certain types of advertisement messages can be presented to a user based on the type of application being utilized by a user.

The foregoing has outlined rather broadly the features and technical advantages of the present invention in order that the detailed description of the invention that follows may be better understood. Additional features and advantages of the invention will be described hereinafter which form the subject of the claims of the invention. It should be appreciated by those skilled in the art that the conception and specific embodiment disclosed may be readily utilized as a basis for modifying or designing other structures for carrying out the same purposes of the present invention. It should also be realized by those skilled in the art that such equivalent constructions do not depart from the spirit and scope of the invention as set forth in the appended claims.

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BRIEF DESCRIPTION OF THE DRAWING

For a more complete understanding of the present invention, and the advantages thereof, reference is now made to the following descriptions taken in conjunction with the accompanying drawing, in which:

5 FIGURE 1 is a diagram showing the interconnection in schematic form of basic elements of a computer network system;

FIGURE 2 is an exemplary illustration of how electronic advertisements have traditionally been displayed in the prior art;

10 FIGURE 3 shows a preferred embodiment of the present invention in which an electronic message is displayed on a target application in an unobtrusive manner;

FIGURE 4 shows an exemplary flow diagram for execution of a messaging application requesting updated message data from a remote server in a preferred embodiment; and

FIGURE 5 shows an exemplary flow diagram for execution of a remote server providing updated message data to a messaging application in a preferred embodiment.

DETAILED DESCRIPTION

In order to better understand a preferred embodiment of the present invention, a brief discussion of a computer network, such as the Internet, in which a preferred embodiment may be implemented is offered. Referring to FIGURE 1, there is shown a conventional prior art 5 network system having user computer 100, including keyboard 101, a display device (e.g., monitor), and having resident therein a general purpose operating system such as WINDOWS, WINDOWS NT, UNIX, MACINTOSH OS, or the like. User computer 100 is connected via a network interface, shown here as modem 102 and public switched telephone network (PSTN) 110, to data grade network 120. In order to more readily describe a preferred embodiment of the 10 present invention, the specific example of network 120 being the Internet shall be used. However, as discussed above, the present invention is not limited to use with the Internet, but may be implemented within other communication networks or within a stand-alone computer.

Network 120, also referred to hereinafter as Internet 120 for purposes of our specific 15 example, may include a plurality of servers, such as domain name servers (DNS) 122 and host servers 121 hosting Internet sites and/or providing other data, such as advertisement information to computer 100 via network 120. The term "server" as used herein is meant to represent a processor-based system, that interacts with a client to provide desired information, such as selected computer files or resources, on demand.

For example, host servers 121 of the Internet are conventionally associated with Internet 20 service providers and serve up resources related to the services of the particular service provider. Likewise, in the Internet example, DNS 122 converts a site name, essentially presenting a human understandable title, associated with one of the many host servers 121 to a particular transmission control protocol/Internet protocol (TCP/IP) address. The TCP/IP address is a unique address on the network, in this example Internet 120, and consists of four 8 bit numbers. The designation 25 TCP/IP identifies the net protocol conventionally used with the Internet and other networks and is well known. In the Internet example, a user typically utilizes a web browser (i.e., a target application), such as Netscape Navigator, Microsoft Internet Explorer, Opera, or America Online to retrieve web pages from particular servers on the world wide web. Users typically access such web pages by activating hyperlinks to such pages or otherwise providing the Uniform Resource

Locator (URL), which is a global address of a web page on the world wide web. Generally, the first part of the address indicates the protocol to use, and the second part specifies the IP address or the domain name where the resource is located.

As discussed above, electronic messages, such as electronic advertisements, have been 5 presented via a network, such as the Internet, in the prior art. To better understand and appreciate a preferred embodiment of the present invention a more detailed explanation of prior art electronic advertising is provided in conjunction with FIGURE 2. As shown in FIGURE 2, an Internet browser window 202 that includes a content portion 204 in which the content information of documents, such as web pages, is displayed. It should be understood, that as used 10 herein the term "document" is intended to refer to any type of content that may be provided. Also, Internet browser 202 includes a title bar 212, on which the name of the browser 204 and/or 15 information related to the web page being accessed, such as the web page's URL, can be displayed. It should be understood that such information 204 is related either to the target application (e.g., web browser) being utilized or a particular document (e.g., web page) being accessed by the target application. A menu bar 216 and tool bar 218 are typically provided on 20 a web browser 202, which allow a user to perform various functions within the browser. Other types of "utility bars" (or "utility portions") may be displayed for a target application, which allow a user to perform various functions within such target application. Additionally, an address box 220 is typically provided on a web browser 202, which allows a user to enter a URL to access a particular web site.

As shown in FIGURE 2, Internet browser window 202 displays a web page in content portion 204. A portion of the web page displayed often contains an electronic advertisement, such as banner 206 shown at the top of content portion 204. Accordingly, electronic advertisement banner 206 is obtrusive for a user desiring to view the actual content information 25 208 of the web page. Additionally, as a user scrolls down the actual content information 208 of the web page document, electronic advertisement banner 206 will typically be removed from the user's view. Furthermore, because electronic advertisement banner 206 is tied to a particular web page, banner 206 only reaches users that access the particular web page on which advertisement banner 206 is placed.

Prior art implementations may exist wherein electronic advertisement banner 206 is stationary and remains displayed within content portion 204 as a user navigates through the actual content 208 of a web page. However, this technique of providing a stationary electronic ad 206 within a web page reduces the amount of the display area that may be utilized for viewing 5 the actual content 208 of a web page. With such a technique, part of the content portion 204 is dedicated to displaying such a fixed/stationary electronic ad 206, which results in less of the content portion 204 being utilized for displaying the actual content 208 of a web page. Thus, such a fixed/stationary electronic ad 206 within a document is obtrusive.

Turning to FIGURE 3, a preferred embodiment of the present invention is shown. As 10 shown, the target application is an Internet browser window 302 that displays a web page document in content portion 304 of the browser. As also shown in FIGURE 3, advertisement banner 206 may be displayed within content portion 304 by the provider of the actual content 208 or an advertising agency with such provider's approval, as discussed above. It should be understood however, that the displayed web page document may be a document that does not 15 provide such an obtrusive advertisement banner 206. Moreover, in an alternative embodiment described herein, such obtrusive advertisement banner 206 may be filtered out of the displayed web page document.

Additionally, a message 306, such as an electronic advertisement, is displayed in an unobtrusive manner. Thus, in a preferred embodiment message 306 is presented in a manner that 20 does not interfere with the actual content 208 being presented to a user. In a most preferred embodiment, such message 306 is displayed in the form of a button 307, as shown in FIGURE 3. Such a button 307 may display the message 306 as stationary text, as scrolling text or otherwise non-stationary text, and/or the message 306 provided on such button 307 may comprise animation, and various other types of graphics. Even though a specific example of an 25 electronic messaging tool implemented as a button 307 is described herein, it should be understood that many other messaging tools may be utilized for displaying an electronic message in an unobtrusive manner, and any such messaging tool is intended to be within the scope of the present invention. Accordingly, an electronic message 306 may be presented in many forms other than a button 307. For example, scrolling text, stationary text, animation, and/or various

types of graphics may be utilized in displaying messages, such as advertisements, in an unobtrusive manner.

Preferably, the electronic messaging tool, which may be referred to as an electronic advertising tool when being utilized to present an advertisement, is implemented as an interactive tool. That is, the electronic messaging tool implemented is most preferably a tool with which a user can interact in some manner. For example, button 307 shown in FIGURE 3 can be a hyperlink button, which when activated connects the user to a web site associated with the electronic message 306. Accordingly, an interactive tool, such as a button 307, can be implemented as a hyperlink, which when activated (e.g., by a user clicking on such tool) links the user to a location or document associated with the displayed message 306. As another example, the electronic messaging tool, when activated, can execute to open a document associated with the message. For instance, the electronic messaging tool can be implemented such that when it is activated it causes a pop-up window containing information related to the message to be displayed.

In a most preferred embodiment, the electronic message 306 is displayed on the title bar 212 of the target application (e.g., the Internet browser) window 302, as shown in FIGURE 3. However, in alternative embodiments, the electronic message 306 may be displayed in some other unobtrusive manner. That is, the electronic message 306 may be displayed in otherwise unused portions of the display of the target application. For example, the electronic message 306 may be displayed on a status bar 310 (or bottom border) of a display portion of the target application or on a top border of a display portion of the target application. As still another example, sometimes the menu bar 216, tool bar 218 and/or other utility bars provided for a target application contain unused portions which may be utilized for displaying electronic messages unobtrusively. For instance, as shown in FIGURE 3, the menu bar 216 has an otherwise unused area immediately below the button 307 displayed on the title bar 212. Accordingly, such otherwise unused area may be utilized for displaying an electronic message. Thus, the message 306 may be enlarged to utilize both the otherwise unused portion of the title bar 212 and the otherwise unused portion of the menu bar 216, or one of the unused portions may be chosen for displaying an electronic message 306. Accordingly, such utility portions that are otherwise unused may be utilized to display an electronic message 306. In a preferred embodiment, a

messaging application, which is discussed in greater detail herein, can recognize such otherwise unused portions of a display of a target application and present an electronic message in a manner that effectively uses such otherwise unused portions. For example, the messaging application may determine whether the menu bar and/or tool bar that are located just below the title bar of a target application contain otherwise unused portions that may be utilized for displaying a message, and if so, the messaging application may adapt the electronic message to take advantage of such otherwise unused portions. Therefore, in a most preferred embodiment, electronic messages may be displayed on any otherwise unused non-content portion of a target application's display. For example, in a most preferred embodiment, electronic messages may be displayed on a "frame" portion of a target application's display.

By providing the electronic message 306 in an otherwise unused portion of the target application window 302, such as the title bar 212, electronic messages (e.g., advertisements) are provided in an unobtrusive manner. Because the electronic message button 307 is provided on the title bar 212 of the target application's display window 302, the message does not interfere with or detract from any of the other information or tools displayed on the window 302. For example, the electronic message 306 is presented in an unobtrusive manner that does not interfere with a user viewing the contents 208 of a web page. Moreover, the electronic message 306 is not removed from the user's viewing area as the user scrolls down the content document (e.g., web page) displayed in display portion 304.

Additionally, the electronic message 306 can be displayed to a user regardless of the content document (e.g., web site) accessed by a user. That is, the electronic message 306 is not required to only be displayed to a user when the user accesses certain content documents, but instead can be displayed to the user regardless of the content document accessed by the user. Furthermore, the electronic message 306 provides information, such as advertisement information, that differs from information 214 that is traditionally provided on such title bar 212. The electronic message 306 can be information unrelated to the provider of the target application (e.g., web browser) and unrelated to the content document (e.g., web page) being accessed by the target application.

Computer executable software code (e.g., a “messaging application”) preferably executes on a user’s PC to provide such electronic messages as described in more detail herein. In a most preferred embodiment such messaging application is stored on a computer readable medium, such as a disk drive, floppy disk, optical disk, Compact Disc (CD), Digital Versatile Disc (DVD), or other data storage device. In a most preferred embodiment, such messaging application is stored and executing locally on a user’s PC. However, in alternative embodiments, such messaging application may be stored and/or executing remotely from the user’s PC. For example, the messaging application may be stored on a remote server and executing at such remote server to perform messaging via a communications network on the user’s PC.

In a most preferred embodiment, a messaging application independent of the target application and the source of the displayed content executes on the user’s PC to display the electronic message 306 on the title bar 212 of a target application’s display window. That is, computer executable software code for displaying the electronic message 306 on the title bar 212 is executing on a user’s PC. Additionally or alternatively, such messaging application may execute to display the electronic message 306 on other unused portions of a target application’s display window, such as the status bar 310, menu bar 216, and/or toolbar 218, as discussed above. Most preferably, some or all of the messaging application is included within some other application executing on the user’s PC (i.e., a “client application”), such as a web accelerator application. For example, a web accelerator as disclosed in co-pending and commonly owned U.S. Patent Application Serial No. 09/009,071 filed January 20, 1998, entitled “SYSTEM AND METHOD FOR ACCELERATING NETWORK INTERACTION,” which is incorporated herein by reference, can further comprise such a messaging application. In such an embodiment, as the web accelerator (or other software application) executes, it provides electronic messages, such as advertisements, as disclosed herein. Such electronic messages may be a known and desired feature of such a client application, or the client application may act as a carrier for loading the electronic messaging feature on a user’s PC.

In an alternative embodiment, the target application on which the electronic message 306 is displayed, such as a web browser, may include some or all of the messaging application software code to provide messaging as disclosed herein. Thus, in a preferred embodiment the electronic messaging application is provided by a different entity than the provider of the target

application, and in an alternative embodiment the messaging application is provided by the entity that provides the target application. The present invention is intended to encompass both embodiments.

Additionally, such messaging application may be provided in other ways. For example, some or all of the messaging application can be provided by a remote server. For instance, an Internet Service Provider (ISP) or some other remote server may execute the messaging application to provide messages on a target application as disclosed herein. For example, an ISP may execute the messaging application such that when a user is connected to the Internet through such ISP electronic messages are displayed on the user's web browser and/or other target applications. Accordingly, the ISP may execute the messaging application to provide messages to some or all of the users connecting to the Internet through such ISP.

In a most preferred embodiment, the electronic message 306 is included on a button 307. In a most preferred embodiment, such button 307 is drawn by the messaging application on title bar 212 of a target application utilizing one of two techniques. In a first technique, the top level window 302 of the target application (e.g., Internet browser) is subclassed. In a preferred embodiment, the messaging application executes within the Windows Socket ("Winsock"). Generally, "Winsock" is an Application Programming Interface (API) for developing Windows programs that can communicate with other machines via TCP/IP protocol. Windows 95, Windows 98 and Windows NT typically come with a Dynamic Link Library (DLL) called WSock32.dll that implements the API and acts as the "glue" between Windows programs and TCP/IP connections. In addition to the Microsoft version of WSock32.dll, there exist other versions of WSock32.dll, such as freeware and shareware versions. In a preferred embodiment, the messaging application executes within the Winsock to subclass each display window created by the target application (e.g., browser), wherein the application alters the Winsock layer (e.g., the WSock32.dll) so that when the target application is loaded the messaging application is made aware that a display window is being or has been created for the target application. Additionally, in a preferred embodiment, the messaging application obtains other information through the Winsock layer that may be utilized in presenting such messages in an effective manner.

In an alternative embodiment, the messaging application is not executing in the Winsock layer. In such an alternative, the messaging application utilizes a "Windows hook" to subclass the target application's display window. That is, the messaging application uses a Windows hook to notify the messaging application when a new window is created. Thereafter, the messaging application can determine whether the window being created is the type of window on which the messaging application is interested in providing an electronic message, such as an advertisement. For example, the messaging application can determine whether the window is a display window for the target application, such as an Internet browser display window. If the display window is one in which the messaging application is interested, the messaging application can then subclass the display window. Accordingly, additional overhead is recognized when utilizing the windows hook because all of the system messages are routed to the messaging application, which then decides whether to do anything with those system messages. The system messages that are not needed by the messaging application are then passed back to Windows to let Windows operate normally. However, when the messaging application is executing in the Winsock layer, the messaging application may only receive messages designated for that specific target application, so there is no additional overhead. Specific programming techniques utilized to perform subclassing either by interacting with the WSock32.dll or utilizing a windows hook are well known within the programming field, and therefore will not be discussed in great detail herein.

The window hook allows the target application's display window (e.g., a browser window) to be subclassed without requiring software in the Winsock layer to perform such subclassing. Accordingly, a messaging application that is not executing within the Winsock layer can display messages on a target application. In a preferred embodiment, all or a portion of the messaging application is executing within the Winsock layer to allow for enhanced messaging features, such as targeted messaging, which is described in greater detail hereafter. In a most preferred embodiment, all of the messaging application is executing within the Winsock layer. However, in other embodiments, a portion of the messaging application may be executing outside the Winsock layer utilizing the windows hook to perform subclassing as described above. In such other embodiments, the application executing in the Winsock layer is smaller and less complicated than if the application in the Winsock layer performed such

subclassing. Additionally, later upgrades to the user interface used in displaying the messages (e.g., the messaging tools) may be simplified in such other embodiments because the application executing in the Winsock layer may not require upgrading. Thus, the user interface may be upgraded without requiring the Winsock layer to be upgraded in such other embodiments.

5 By subclassing a window, the electronic messaging application has its own window procedure that can be utilized by the electronic messaging application to allow the messaging application to monitor all of the events occurring within the target window, such as Internet browser window 302. For example, the messaging application is capable of determining when the title bar needs to be redrawn. For instance, if the target window is being resized, the messaging application is capable of determining that the title bar's size is being altered. The messaging application can obtain handles to the device contexts (known as "HDC") for the target window(s). HDC is a handle to a device context typically used within a Windows' program to draw all visual aspects of an application. Thus, the messaging application is capable of determining when the button 307 or other messaging tool utilized needs to be redrawn on the title 10 bar 212 or other unobtrusive portion of the target application's display.

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The following provides two techniques that may be utilized in a preferred embodiment for drawing or displaying a button 307. Even though the specific example of a button 307 is utilized, it should be understood that other messaging tools may be implemented instead of or in addition to such a button, and any such implementation is intended to be within the scope of 20 the present invention. With a first technique, the electronic messaging application draws button 307 utilizing device context commands. In other words, the messaging application utilizes commands to change the color of the pixels that are being drawn on the title bar 212 of the target application. In a second technique, an independent, stand-alone window, also called a "pop up window," is created by the messaging application and positioned in the appropriate place on top 25 of the target application's title bar (i.e., covering the view of such title bar). Thus, the first technique draws a button 307 directly on title bar 212, and the second technique utilizes a separate window that "floats" in front of the view of title bar 212 and appears to be attached to the title bar 212.

Well known programming commands can be utilized for drawing button 307 in the first technique, and well known Windows programming commands can be utilized to create the separate window forming button 307 in the second technique. Accordingly, the programming commands associated with creating such a button 307 utilizing the above techniques will not be discussed in great detail herein. Both the first and second techniques can be utilized to create a button 307 resulting in a button 307 having substantially the same appearance with either technique. For example, the second technique can create a window that appears to be a button, rather than a typical window. For instance, a button 307 created by the second technique may be a window that does not have the system controls (e.g., the controls for hiding or closing such a window) that are normally provided in the upper right hand corner of a typical window or a scroll bar that is generally included within a typical window. Thus, the window may have substantially the same appearance as a button 307 drawn utilizing the first technique.

Because of a particular characteristic (or "bug") currently present in the Windows NT operating system version of Internet Explorer, the second technique may be more preferable for such operating system. Currently, if the first technique of drawing (or "painting") an electronic messaging button 307 on the unused portion of the title bar 212 of a target application (specifically Internet Explorer) executing in the Windows NT operating system, the traditional text on the title bar, such as text 214, can become corrupted. For example, suppose the browser window 302 of FIGURE 3 is executing in the Windows NT operating system. By using the first technique of drawing the electronic messaging button 307 directly on title bar 212, the name of the web browser 214 on the title bar can be corrupted. Accordingly, a preferred embodiment utilizes the second technique of utilizing a separate pop-up window for the button 307 when being used for a window executing in the Windows NT operating system.

It is most preferable to use the first technique of drawing an electronic messaging button 307 directly on title bar 212 when executing in an operating system other than Windows NT because such a first technique allows for faster updating or changing of the button. For example, suppose a user resizes or moves the target display window 302. The messaging application receives notice of such action a few microseconds after it occurring. When the electronic message is being displayed on the target window's title bar utilizing a separate pop-up window, the messaging application moves/adjusts the pop-up window according to the change in the

target window. For instance, if a user drags a target application's display window from one location to another location, the messaging application receives notice of such a drag and moves the location of the pop-up window so that the pop-up window is displayed on the title bar of the display window in its new location. However, there can be times when the messaging 5 application does not receive notice of a change in the target application's display window quick enough to allow the pop-up window to be updated in a seemingly instantaneous manner. As a result, a visual "flash" may appear to the user as the background color of the title bar is first displayed and is then covered by the pop-up window.

Continuing with the above example of moving or resizing a target application's display 10 window, suppose that the electronic message is being created on the title bar of the target display window utilizing the first technique of drawing the button 307 directly on the title bar 212. With this technique, the "flash" can be avoided by the messaging application not allowing the color of the title bar to be painted underneath the button 307. Accordingly, when the messaging application redraws the button 307 on the title bar 212 in its new position, it appears 15 instantaneous with the redrawing of the title bar 212 without a visual "flash" in color.

In a most preferred embodiment, a messaging application executing on a user's PC periodically accesses the Internet and requests a message to be displayed on the messaging tool from a remote server. In a preferred embodiment, the messaging application posts the requests 20 to the server using HTTP protocols, and in response, the server determines the proper message to return and sends the proper message information (data) back to the messaging application. Such message information may comprise data to be displayed to the user or it may indicate a particular message in a database to display. Additionally, such data may comprise data 25 representing a document or location to be accessed if the interactive messaging tool is activated. For example, such data may comprise the Uniform Resource Locator (URL) to access if the interactive messaging tool is activated by a user. Additionally, the message information may comprise data for the type of messaging tool to be utilized, such as a button, scrolling text, or an animated message (e.g., a cartoon). Thus, in a preferred embodiment, a first message presented 30 to a user may utilize a button and another message may utilize some other type of tool, such as scrolling text. Such information may indicate the messaging tool to be utilized, such as a button, and/or such information may indicate how the message is to be presented on such tool, such as

stationary text, scrolling text, graphics, and/or animation. When the messaging application receives the message information (data) from the server, it informs the current displays of the target application (e.g., the current browser display windows) of the new message information. Accordingly, the electronic messaging tools, such as a button, may be updated with the new message and other information associated with the message, such as a new URL.

5 Thus, in a most preferred embodiment a user is periodically presented a new message having a new URL that will be accessed if the interactive message tool is activated by the user. It should be understood however, that in alternative embodiments the message information may be updated in some other manner. For example, the message information may be event driven, 10 wherein it is updated upon the occurrence of a particular event, such as a user accessing a new document (e.g., web site). In a preferred embodiment, the messaging application determines from the system messages available in the WinSock layer whether a user is connected to the Internet (or other communications network). The messaging application only attempts to request message information from the remote server as described above when the user is connected to 15 the Internet or other communications network. Otherwise, if the user were not connected to a communications network and the messaging application attempted to request message information from the remote server, then with each request attempt the user would be presented a dial-up pop-up window requesting the user's password for connecting to the communications network or some other information related to accessing the communications network. If the user 20 does not want to connect to such communications network (e.g., the Internet), the periodic attempt to connect by the messaging application would be undesirable. Accordingly, a preferred embodiment only attempts to obtain message information from the server when the user is already connected to the communications network.

25 Turning to FIGURES 4 and 5, exemplary flow diagrams illustrate how message information (e.g., advertisement information) is updated in a preferred embodiment. FIGURE 4 shows an exemplary flow chart for the messaging application requesting an update for the message information. As shown, the flow diagram starts at block 502. At block 504, the messaging application determines whether the user is connected to a communications network, such as the Internet. If the user is not connected to the communications network, the messaging 30 application does not attempt to obtain message information. If, on the other hand, the user is

connected to the communications network, the messaging application requests message data from a remote server via the communications network at block 506. Thereafter, the messaging application receives the requested message data from the remote server via the communications network at block 508. In response to receiving the new message data, the messaging application 5 updates the target application's display(s) with the newly received message data at block 510. Thereafter, the messaging application determines whether new message data is needed once again at block 512. As described above, at block 512 the messaging application may determine whether a particular time period has passed (for periodic updating) or whether a particular event has occurred (for event driven updating). When the messaging application determines that the 10 message data needs to be updated again, the program's execution loops back to block 504, wherein the messaging application ensures that the user is connected to the communications network and obtains message data as described above.

FIGURE 5 shows an exemplary flow diagram for the execution of a remote server that provides message data to the messaging application. As shown, the flow diagram starts at block 15 602. The remote server receives a request for message data from the messaging application via the communications network (e.g., the Internet) at block 604. In response, the remote server determines the message data to return at block 606. For example, such request that the server received at block 604 may contain information, such as demographic, psychographic, and/or other information about the user, that can be utilized for determining which message data (e.g., 20 advertisement data) should be returned to the user. Such demographic, psychographic, and/or other information may be communicated as a unique ID that identifies the user. At block 608, the server returns the requested message data to the messaging application via the communications network, and the end of the server's execution is illustrated at block 610.

In an alternative embodiment, message information may be stored locally on a user's hard 25 drive, and the messaging application can then periodically update its display of messages on the target application from such local message information. For example, message information may be stored as a database on the user's hard drive, and such database may be updated from a remote server when the user connects to a communications network (e.g., the Internet). When the user 30 is not connected to the communications network, messages (e.g., advertisements) may be presented from the local database. As another example, message information may be stored as

5 a database on the user's hard drive, and such database may be updated from time to time by the user loading new message information from a floppy disk, CD, DVD, or other data storage medium. Additionally, if the user activates an interactive message tool utilized for a message, then such activation may connect the user to the communications network (e.g., Internet) and access the corresponding location/document (e.g., URL) for the message or such activation may cause a local content document to be displayed.

10 Thus, as explained above, message information may be stored on a remote server, which communicates message data to the messaging application executing on a PC via a communication network (e.g., the Internet). Alternatively, message information may be stored locally on the user's hard drive or other local storage medium and updated periodically via a communication network or via some other method, such as periodically installing updated information from a CD.

15 Such advertisements may be presented to a user in a defined order or at random. For example, advertisers may pay to have their advertisements included in a database of advertisements (either stored on a remote server or stored locally), and as advertisements are requested, the database presents each one in order. However, in a preferred embodiment, "target" messaging can be performed. That is, messages can be "targeted" for a specific user. The specific example of targeted advertising is utilized herein to render the present invention enabling for targeting many types of messages. Accordingly, even though the specific example of 20 advertisements being targeted is provided herein, it should be understood that the present invention is intended to encompass targeting any type of messages to a user.

25 In a most preferred embodiment, demographic information about the user is available to the provider of the messaging application. For example, when the user obtains the messaging application (or a client application, such as a web accelerator, that includes the messaging application), the user completes demographic information about himself or herself. For instance, the messaging application or a client application that includes the messaging application may be given to users at a very low cost or free of cost. However, the provider may require each user to complete a survey, which provides useful demographic information about the user. Such demographic information can comprise demographic information commonly used by advertisers

in marketing products and services. For example, such demographic information may include such information as age, sex, occupation, interests, and various other information about a user. As an example, the provider may allow a user to download the messaging application or a client application that includes the messaging application from the Internet (or other communications network) free of charge, if the user completes an on-line survey. The provider can then tailor the advertisements that are presented to a user based on such demographic information. For example, the provider can specify that certain advertisements matching a user's interests be presented to the user.

Furthermore, advertisers can specify that their advertisements be presented to users having certain demographics. Additionally, advertisers may provide different types of advertisements to be presented to users based on the users' demographic information. For example, a department store may specify that an advertisement geared toward men be presented to all male users and an advertisement geared toward women be presented to all female users. As a further example, an automotive dealership may specify that certain features of an automobile be advertised to some users and other features be advertised to other users based upon the users' demographics. Such advertising can provide advertisers greater confidence that their advertisement will reach its target audience.

In a preferred embodiment, a request for message information is communicated from the messaging application to a remote server, and such request comprises demographic data for the user. For example, the request for message information can include a unique ID that identifies a particular user. Based on the ID received, the server can determine the types of advertisements to return to the messaging application.

As described above, demographic information may be utilized in targeting advertisements to particular users. Likewise, "psychographic" information may be utilized instead of or in addition to such demographic information. Psychographic information is information related to a user's actions on a digital computer. For example, psychographic information may comprise historical information about what a user executes on the user's computer, how the user utilizes the user's computer, and other information. As one example, psychographic information may comprise information about the type of application programs that a user typically utilizes, such

as a word processor, games, and/or other types of application programs. Such psychographic information may be useful in determining the types of advertisements that may be effectively targeted to this user. For example, suppose a user often plays video games on the user's computer, advertisements for games, or accessories, such as joysticks, may be determined to be effective for this user. Other types of ads unrelated to video games may be presented to the user based at least in part on the psychographic information indicating that the user often plays video games. For instance, advertisers may determine that based at least in part on such psychographic information indicating that the user often plays video games, that the user is likely to be interested in particular toys, automobiles, movies, books, CDs, or other products or services.

As yet another example, psychographic information may comprise information about a user's actions on a communications network, such as the Internet. For instance, the type of web sites that a user typically visits can be compiled as psychographic information. For instance, if a user continuously accesses web sites that sell books and CDs, such psychographic information would allow the advertisement provider to determine that this is a particular area of interest for the user and future advertisements could be geared toward that interest. As a further example, the messaging application may determine the web site that is being viewed by a user and display an advertisement for related products or services that a user is likely to require. For example, if a user is viewing a real estate web site for an agency that offers homes for sale, the messaging application may recognize this and display advertisements related to home owner's insurance, banks (for mortgages), and other services that a user interested in purchasing a home is likely to need. Such symbiotic advertising may provide advertisers an effective method for reaching potential customers.

Accordingly, target advertising may be implemented within a preferred embodiment by utilizing demographic information, psychographic information, and/or other available information. Likewise, highly targeted advertising based on content can be implemented within a preferred embodiment. For example, symbiotic advertising may be implemented, as discussed above, and/or counter-advertising may be implemented. For example, the messaging application can determine the web site that a user is accessing, and the messaging application can display an advertisement for a competitor or symbiotic web site. For instance, suppose a user is viewing a web site for Company A, which sells books and CDs. The messaging application can

5 determine the site that a user is visiting and display an advertisement for Company B, a direct competitor of Company A. Such counter-advertising has not been available in the prior art because the owner of a particular web site would not permit a competitor's advertisement to be displayed on its web site. Because advertisements in the prior art were provided on a web site by the owner of the web site or by a third party with the owner's permission, the owner could prevent such counter-advertisements from being displayed. However, because the messaging application of a preferred embodiment is unrelated to a web site owner and displays advertisements independent of such a web site owner, counter-advertisements can be provided by the messaging application.

10 As described above, the counter-advertisements and/or symbiotic advertisements may be presented based on a particular URL or web site that a user is viewing. Likewise, counter-advertisements and/or symbiotic advertisements can be presented based on particular content on a web site. For example, the messaging application can recognize a particular banner advertisement displayed on a web site, and the messaging application can display a counter-advertisement for a competitor of the company advertising in such banner or a symbiotic advertisement for such banner ad. Moreover, in a most preferred embodiment, the messaging application is executing within a client application, such as the web accelerator disclosed in co-pending and commonly owned U.S. Patent Application Serial No. 09/009,071 filed January 20, 15 1998, entitled "SYSTEM AND METHOD FOR ACCELERATING NETWORK INTERACTION," which is incorporated herein by reference. Utilizing methods described in 20 "SYSTEM AND METHOD FOR ACCELERATING NETWORK INTERACTION," or other methods for recognizing and filtering advertisements, such a web accelerator can execute to filter out (or "block") advertisements from a web site that is being displayed. Accordingly, in a most preferred embodiment a web accelerator can filter out advertisements from the content of a web 25 site, such as banner advertisement 206 shown in FIGURE 3, while providing advertisements unobtrusively. Thus, a user can be allowed unobstructed viewing of the desired content. Additionally, advertisers can gain the benefits of target advertising, counter-advertising, and/or being the only advertisement displayed to a user by having other advertisements filtered out. Accordingly, advertisers have great incentive to utilize such an messaging application for 30 advertising.

It should be recognized that in a preferred embodiment, the messaging application can recognize advertisements, such as banner advertisements, contained within the content of a web site. Additionally, the messaging application can provide a counter-advertisement for a direct competitor of the company advertising within the content of a web site. Moreover, the messaging application can block out the advertisement from a web site. Thus, the messaging application may be implemented in a manner such that only a counter-advertisement to an advertisement within the content of a web site is displayed. Thus, advertisers may have great incentive to advertise within the messaging application, as opposed to advertising within the content of a web site. Because of the great features that can potentially be provided by the messaging application, such as providing an unobtrusive advertisement tool that continuously remains within the user's viewing area, providing targeted advertising, and providing counter-advertising, advertisers will have great incentive to present electronic advertisements in this manner.

It should be understood that in a most preferred embodiment the electronic messages displayed to a user are electronic advertisements. However, in alternative embodiments, such electronic messages may be messages of any type, conveying any type of information.

It should also be understood that in a most preferred embodiment, a web browser is a target application on which electronic messages are displayed unobtrusively. However, in alternative embodiments, other types of target applications may be utilized for displaying an electronic message unobtrusively instead of or in addition to a web browser.

Although the present invention and its advantages have been described in detail, it should be understood that various changes, substitutions and alterations can be made herein without departing from the spirit and scope of the invention as defined by the appended claims. Moreover, the scope of the present application is not intended to be limited to the particular embodiments of the process, machine, manufacture, composition of matter, means, methods and steps described in the specification. As one of ordinary skill in the art will readily appreciate from the disclosure of the present invention, processes, machines, manufacture, compositions of matter, means, methods, or steps, presently existing or later to be developed that perform substantially the same function or achieve substantially the same result as the corresponding

embodiments described herein may be utilized according to the present invention. Accordingly, the appended claims are intended to include within their scope such processes, machines, manufacture, compositions of matter, means, methods, or steps.

**WHAT IS CLAIMED IS:**

1. A method of providing electronic messages in an unobtrusive manner, the method comprising:

displaying content from a first provider on a target application executing on a digital computer, said target application provided by a second provider, wherein said target application comprises at least one display; and

5 presenting an electronic message on said at least one display in an unobtrusive manner, wherein said electronic message is not required to be associated with either said first provider or said second provider.

2. The method of claim 1, wherein said electronic message is an electronic advertisement.

3. The method of claim 1, wherein said target application provided by said second provider is a web browser and said content of said first provider is a web page.

4. The method of claim 1, wherein said at least one display is a display window.

5. The method of claim 1, wherein said at least one display comprises a title bar, said method further comprising:

presenting said electronic message on said title bar of said at least one display.

6. The method of claim 1, wherein said presenting an electronic message on said at least one display in an unobtrusive manner comprises presenting said electronic message in at least one of the following manners:

5 on a title bar of said at least one display, on a status bar of said at least one display, on a bottom border of said at least one display, on a side border of said at least one display, and on a utility bar of said at least one display.

7. The method of claim 6, wherein said utility bar is a bar selected from the group consisting of a menu bar and a tool bar.

8. The method of claim 1, wherein said electronic message is an interactive electronic message.

9. The method of claim 8, wherein said interactive electronic message is a hyperlink.

10. The method of claim 1, wherein said electronic message presented as a message tool selected from the group consisting of:

a button, scrolling text, stationary text, animation, graphics, and a combination thereof.

11. The method of claim 1, wherein said presenting said electronic message is performed in a manner that accomplishes targeted messaging.

12. The method of claim 11, wherein said electronic message is presented based at least in part on demographic information.

13. The method of claim 11, wherein said electronic message is presented based at least in part on psychographic information.

14. The method of claim 1, wherein said presenting said electronic message is performed in a manner that accomplishes counter-messaging.

15. The method of claim 14, wherein said electronic message is presented based at least in part on said content.

16. The method of claim 1, wherein said presenting said electronic message is performed in a manner that accomplishes symbiotic messaging.

17. The method of claim 16, wherein said electronic message is presented based at least in part on said content.

18. The method of claim 1, further comprising:

5 said presenting said electronic message is performed in a manner that accomplishes targeted messaging, wherein said targeted messaging comprises at least one of the group consisting of presenting said electronic message based at least in part on demographic information, presenting said electronic message based at least in part on psychographic information, presenting said electronic message as a counter-message based at least in part on said content, presenting said electronic message as a symbiotic message based at least in part on said content, and presenting said electronic message based at least in part on said target application.

19. The method of claim 1, further comprising:

periodically updating said electronic message.

20. The method of claim 1, further comprising:  
updating said electronic message upon the occurrence of an event.

21. The method of claim 1, further comprising:  
updating said electronic message from a remote server via a communications network.

22. The method of claim 21, wherein said communications network is a network selected from the group consisting of:  
the Internet, an intranet, a local area network, a wide area network, an interactive cable system, and a public switched telephone network.

23. The method of claim 1, further comprising:  
updating said electronic message from information stored locally.

24. A method of providing electronic messages in an unobtrusive manner, the method comprising:

executing a target application provided by a first entity on a digital computer, wherein said application comprises at least one display portion; and

5 executing a messaging application to present an interactive electronic message on said at least one display portion in an unobtrusive manner.

25. The method of claim 24, wherein said electronic message is an electronic advertisement.

26. The method of claim 24, wherein said target application an application selected from the group consisting of:

a web browser, a word processor, a spreadsheet, and a video game.

27. The method of claim 24, wherein said messaging application is at least partly included within a client application.

28. The method of claim 27, wherein said client application is a web accelerator.

29. The method of claim 24, wherein said messaging application is at least partly included within said target application.

30. The method of claim 24, wherein said messaging application presents an interactive electronic message on a title bar of said at least one display portion.

31. The method of claim 24, wherein said electronic message is an interactive electronic message.

32. The method of claim 24, further comprising:

said messaging application executes to present said electronic message in a manner that accomplishes targeted messaging.

33. The method of claim 32, wherein said targeted messaging is selected from the group consisting of:

presenting said electronic message based at least in part on demographic information,  
presenting said electronic message based at least in part on psychographic information,  
5 presenting said electronic message as a counter-message, presenting said electronic message as a symbiotic message, presenting said electronic message based at least in part on said target application, and any combination thereof.

34. The method of claim 24, further comprising:

said messaging application executes to update said electronic message.

35. The method of claim 34, wherein said messaging application executes to update said electronic message periodically.

36. The method of claim 34, wherein said messaging application executes to update said electronic message from a remote server via a communications network.

37. The method of claim 36, wherein said communications network is a network selected from the group consisting of:

the Internet, an intranet, a local area network, a wide area network, an interactive cable system, and a public switched telephone network.

38. The method of claim 34, wherein said messaging application executes to update said electronic message from information stored locally.

39. Computer executable software code stored on a computer readable medium, the code for providing electronic messages in an unobtrusive manner, the code comprising:

code responsive to a target application executing on a digital computer to provide a display portion of said target application, for displaying an electronic message unobtrusively on said target application's display portion, wherein said target application is provided by a first entity and is operable to present content of a second entity.

5 40. The computer executable software code of claim 39, wherein said electronic message is an electronic advertisement.

41. The computer executable software code of claim 39, wherein said code for displaying an electronic message unobtrusively displays said electronic message on a title bar of said target application's display portion.

42. The computer executable software code of claim 39, wherein said code for displaying an electronic message unobtrusively displays said electronic message in at least one of the following manners:

5 on a title bar of said target application's display portion, on a status bar of said target application's display portion, on a bottom border of said target application's display portion, on a side border of said target application's display portion, and on a utility bar of said target application's display portion.

43. The computer executable software code of claim 39, wherein said electronic message is an interactive electronic message.

44. The computer executable software code of claim 39, further comprising:  
code for displaying said electronic message in a manner that accomplishes targeted messaging.

45. The computer executable software code of claim 39, further comprising:  
code for requesting message data from a remote server via a communications network;  
code for receiving message data from said remote server via said communications network; and  
5 code responsive to receiving said message data for displaying an electronic message.

46. The computer executable software code of claim 45, wherein said code for requesting message data further comprises:  
code for requesting message data based on at least one of the following  
demographic information, psychographic information, information about content  
5 being presented by said target application, and information about said target application.

47. The computer executable software code of claim 45, wherein said code for requesting message data periodically requests such message data.

48. The computer executable software code of claim 45, wherein said communications network is a network selected from the group consisting of:  
the Internet, an intranet, a local area network, a wide area network, an interactive cable system, and a public switched telephone network.

49. The computer executable software code of claim 39, wherein said display portion is a display window.

50. A method of doing business, said method comprising:

selling messages to be included within a computer executable electronic messaging application to messengers; and

providing users said computer executable electronic messaging application at a low cost

5 to said users, wherein said electronic messaging application is executable to present said electronic messages on a display portion of a target application executing on a computer.

51. The method of claim 50, wherein said messages are advertisements and said messengers are advertisers.

52. The method of claim 50, wherein said electronic messages are displayed on said display portion of a target application unobtrusively.

53. The method of claim 52, wherein said electronic message is displayed in at least one of the following manners:

on a title bar of said display portion, on a status bar of said display portion, on a bottom border of said display portion, on a side border of said display portion, and on a utility bar of said 5 display portion.

54. The method of claim 50, wherein said electronic message is an interactive message.

55. The method of claim 50, wherein said computer executable electronic messaging application is included within a client application.

56. The method of claim 50, wherein said computer executable electronic messaging application is operable to display said electronic message in a manner that accomplishes targeted messaging.

57. The method of claim 56, wherein said targeted messaging is selected from the group consisting of:

presenting said electronic message based at least in part on demographic information,  
presenting said electronic message based at least in part on psychographic information,  
5 presenting said electronic message as a counter-message, presenting said electronic message as a symbiotic message, presenting said electronic message based at least in part on said target application, and any combination thereof.

58. The method of claim 50, wherein said low cost is free.

59. A computer system for presenting electronic messages, said computer system comprising:

a memory for storing computer executable software code;  
a processor for executing the software code stored in said memory;  
5 a display device;

wherein the software code includes code responsive to a target application executing on said computer system to present a display portion on said display device, for displaying an electronic message unobtrusively on said display portion of said target application, wherein said target application is provided by a first entity and is operable to present content of a second entity; and

10 wherein said software code displays said electronic message independent of said target application and said content.

60. The computer system of claim 59, wherein said electronic message is an electronic advertisement.

61. The computer system of claim 59, wherein said electronic message is displayed in at least one of the following manners:

on a title bar of said display portion, on a status bar of said display portion, on a bottom border of said display portion, on a side border of said display portion, and on a utility bar of said display portion.

5 62. A system for presenting electronic messages, the system comprising:

means for storing computer executable software code;

means for executing said software code;

means for displaying display information for said software code;

5 wherein the software code includes code responsive to a target application executing on said computer system to present a display portion on said display device, for displaying an interactive electronic message on said display portion of said target application.

63. The system of claim 62, wherein said electronic message is an electronic advertisement.

64. The system of claim 62, wherein said software code includes code for displaying said electronic message unobtrusively on said display portion.

65. The system of claim 64, wherein said electronic message is displayed in at least one of the following manners:

on a title bar of said display portion, on a status bar of said display portion, on a bottom border of said display portion, on a side border of said display portion, and on a utility bar of said display portion.

5

66. A method of providing targeted electronic messaging, the method comprising:

executing a target application provided by a first entity on a digital computer, wherein said target application comprises at least one display portion on which said target application can display content;

5

presenting an electronic message on said at least one display portion, wherein said electronic message is presented as a targeted message and wherein said electronic message is presented independent of said content.

67. The method of claim 66, wherein said electronic message is an electronic advertisement.

68. The method of claim 66, wherein cooperation of a provider of said content is not required to present said electronic message.

69. The method of claim 66, wherein said targeted message comprises at least one from the group consisting of:

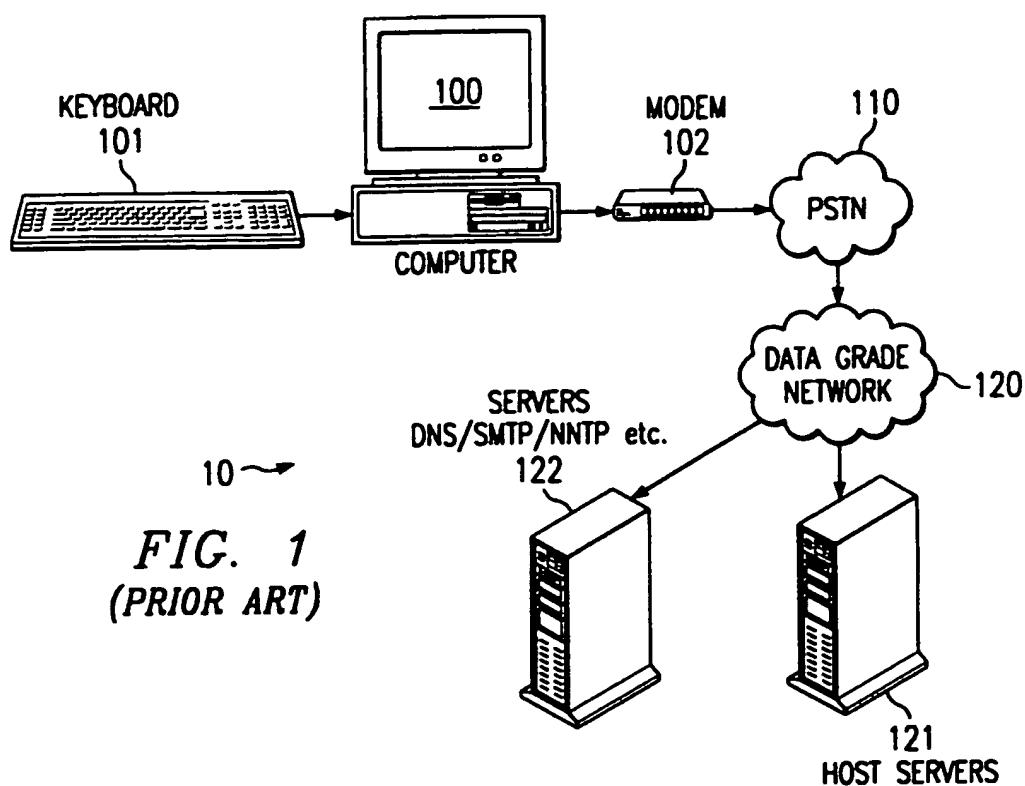
presenting said electronic message based at least in part on demographic information, presenting said electronic message based at least in part on psychographic information, presenting said electronic message as a counter-message, presenting said electronic message as a symbiotic message, and presenting said electronic message based at least in part on said target application.

5

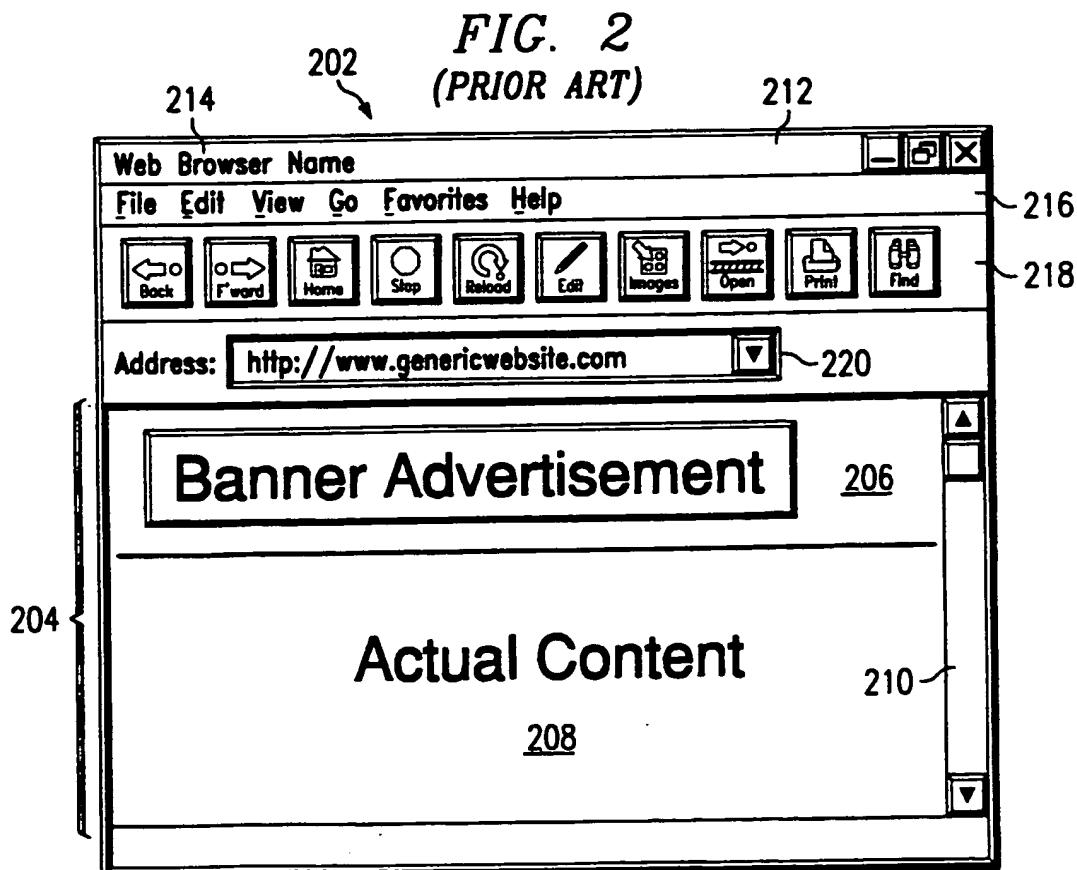
70. The method of claim 66, wherein said electronic message is presented based at least in part on demographic information for a user.

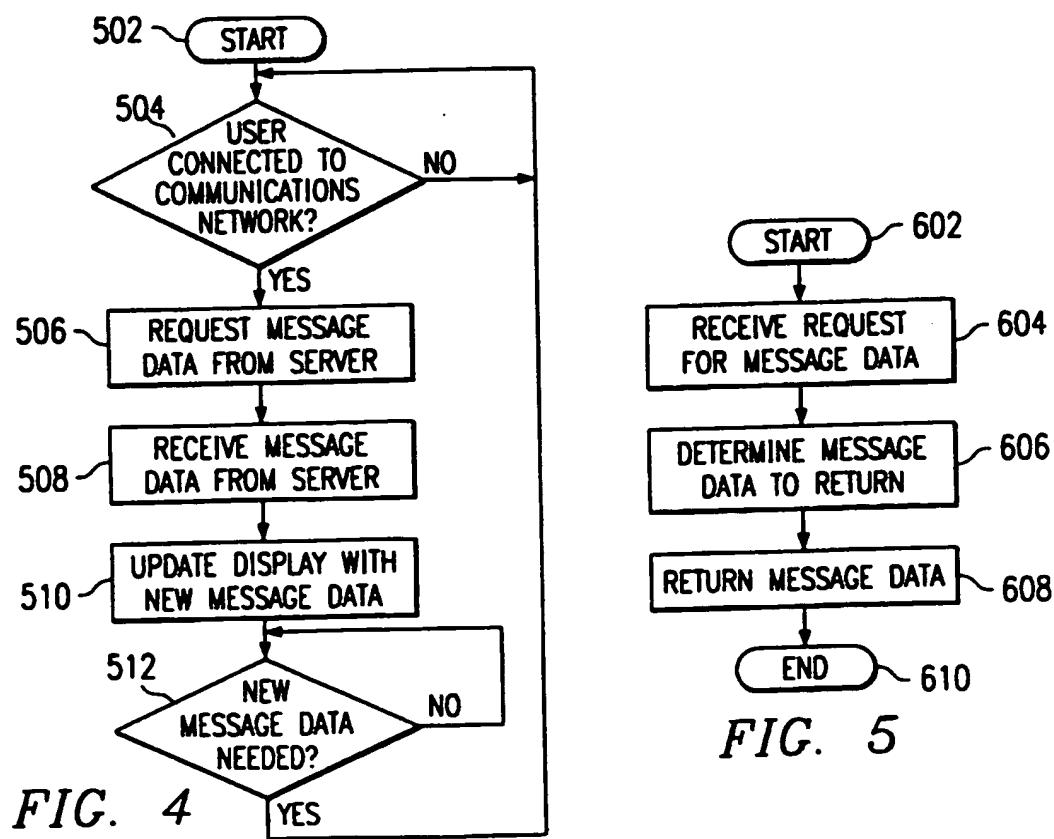
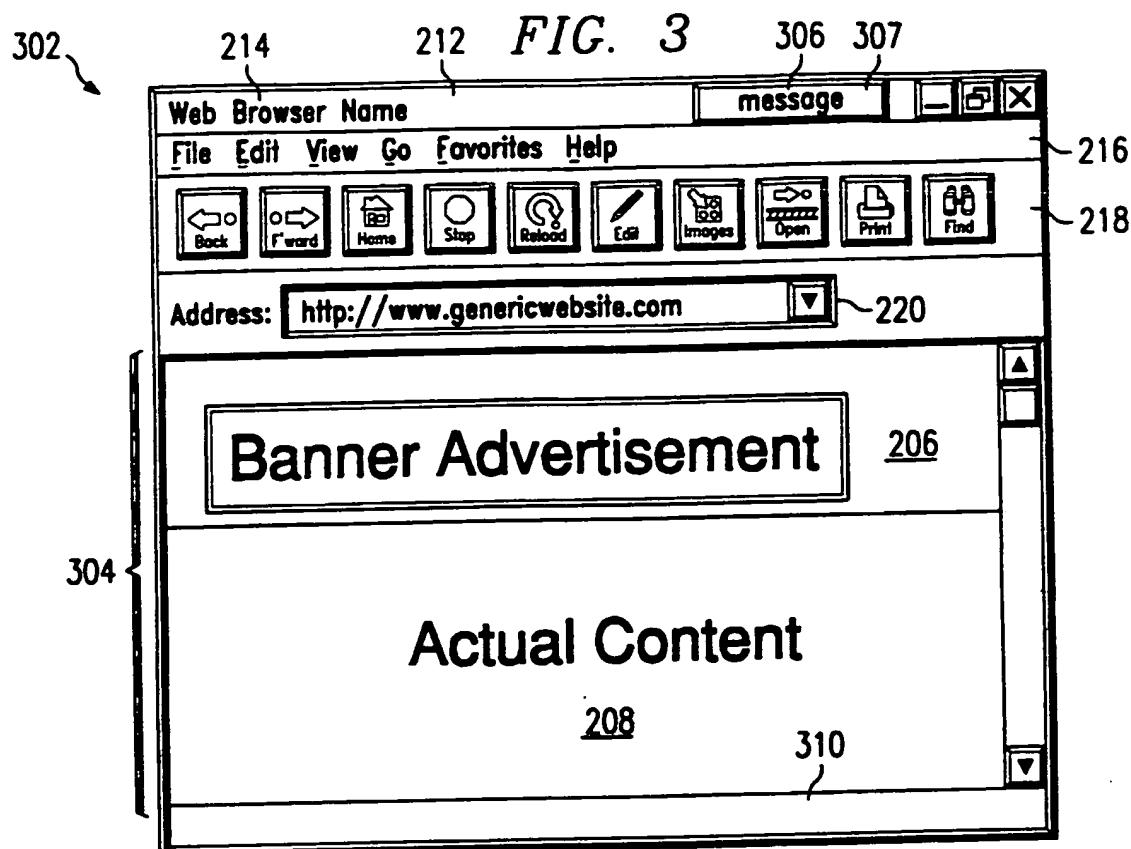
71. The method of claim 66, wherein said electronic message is presented as a counter-message based at least in part on content being presented by said target application.

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**FIG. 1**  
(PRIOR ART)





## INTERNATIONAL SEARCH REPORT

International application No. PCT/US00/25354
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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 15/16, 17/30

US CL : 709/202, 205, 219

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 709/202, 205, 219

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

East

search terms: advertisements, internet, banner

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,933,811 A (ANGLES et al) 03 August 1999, col. 1, line 14 - col.4, line 46.	1-71
X,P	US 6,009,410 A (LEMOLE et al) 28 December 1999, col. 1, line 11 - col. 2, line 55.	1-71

Further documents are listed in the continuation of Box C.  See patent family annex.

Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"P" document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search  06 NOVEMBER 2000	Date of mailing of the international search report  18 DEC 2000
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